

U.S. Patent Application Serial No. 10/069,977
Response filed September 29, 2004
Reply to OA dated July 1, 2004

AMENDMENTS TO THE CLAIMS:

Please amend claims 12 and 13 as follows:

Claims 1-3 (Canceled).

Claim 4 (Previously Presented): The method for analyzing an intestinal bacterial flora according to claim 5, wherein said probes are arranged on specific positions in a detector.

Claim 5 (Previously Presented): A method for analyzing an intestinal bacterial flora of a subject, comprising:

a nucleic acid amplifying step of amplifying nucleic acid of an intestinal bacterial group in a sample extracted from the subject with a specific PCR primer; and

an analysis step of analyzing the intestinal bacterial flora on the basis of an amplified fragment obtained in said nucleic acid amplifying step, wherein

hybridization with said amplified fragment is performed using a plurality of probes so that analysis of the intestinal bacterial flora is performed based upon presence/absence of formation thereof in said analyzing step, and

said probes are arranged on specific positions in a detector.

Claim 6 (Previously Presented): The method for analyzing an intestinal bacterial flora according to claim 4 or 5, wherein nucleic acid amplified from each intestinal bacterium with the

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PCR primer employed in said nucleic acid amplifying step is used as a probe.

Claim 7 (Previously Presented): The method for analyzing an intestinal bacterial flora according to claim 4 or 5, wherein the nucleic acid obtained in said nucleic acid amplifying step is denatured before introduction into said detector.

Claim 8 (Previously Presented): The method for analyzing an intestinal bacterial flora according to claim 4 or 5, wherein a set temperature of said detector is arbitrarily changeable according to an instruction from a temperature controller.

Claim 9 (Previously Presented): The method for analyzing an intestinal flora according to any of claims 5 to 8, wherein said specific PCR primer has a sequence capable of amplifying a nucleic acid region coding 16SrRNA of said intestinal bacterium.

Claims 10 and 11 (Canceled).

12. (Currently amended): An apparatus for analyzing an intestinal bacterial flora, comprising:
a nucleic acid amplifier that amplifies nucleic acid of an intestinal bacterial group in a sample extracted from a subject;

a hybridizer that hybridizes said amplified nucleic acid and a specific probe; and
an analyzer that analyzes the intestinal bacterial flora from a result of said hybridization ~~The~~
~~apparatus for analyzing an intestinal bacterial flora according to claim 11,~~ wherein said hybridizer
includes a DNA chip in which is arranged and immobilized a probe having a nucleic acid sequence
occurring in the genome of the intestinal bacterial group.

13. (Currently amended): An apparatus for analyzing an intestinal bacterial flora,
comprising:

a nucleic acid amplifier that amplifies nucleic acid of an intestinal bacterial group in a sample
extracted from a subject;

a hybridizer that hybridizes said amplified nucleic acid and a specific probe; and
an analyzer that analyzes the intestinal bacterial flora from a result of said hybridization ~~The~~
~~apparatus for analyzing an intestinal bacterial flora according to claim 11,~~ wherein said hybridizer
includes a detector where a specific probe having a nucleic acid sequence occurring in the genome
of the intestinal bacterial group is arranged on a specific position.

Claim 14 (Previously Presented): The apparatus for analyzing an intestinal bacterial flora
according to claim 13, wherein:

said nucleic acid amplifier comprises a PCR primer; and

said probe is obtained by amplifying nucleic acid from the intestinal bacterial group with

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said PCR primer.

Claim 15 (Original): The apparatus for analyzing an intestinal bacterial flora according to claim 13, wherein a DNA denaturation part that denatures nucleic acid is provided on a front stage of said detector.

Claim 16 (Original): The apparatus for analyzing an intestinal bacterial flora according to claim 13, comprising a temperature controller capable of arbitrarily changing a set temperature of said detector.